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## and then, two chip startups were no more

Contributed by Maciej Bajkowski  
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Out of the blue two major semiconductor startup acquisitions occurred during the last week. First, Apple acquired PowerPC chip developer P. A. Semi, and then a day later Sun Microsystems snapped up Montalvo who we just recently wrote about as being in need of some serious funding. Let's talk about the latter acquisition first. If what the The Register is reporting is correct, then Sun got quite a bargain in acquiring Montalvo for a mere five million dollars, as venture capital firms poured about \$73 million into the low-power startup over the last few years. It has been widely speculated that Sun is mostly interested in some of the patents which we discussed here, as well as the engineering team, rather than the actual product that the company was working on. Since the name of the game has changed from a pure MHz race to performance per Watt race, any patents that will enable Sun to produce low-power versions of their Rock and Niagara processors seem like a good investment. In any case, it truly seems that Montalvo simply could not find additional funding and thus opted for being acquired as an exit strategy rather than shutting down shop completely. The Apple acquisition sent shock waves throughout the industry and was followed by rampant speculation. Initially, when Apple dropped Freescale as the chip supplier for their notebooks, many expected for the company to announce that they were going with P. A. Semi. As a matter of fact, when Apple announced that they were going with Intel, the news even caught the P. A. Semi CEO off guard. But P. A. Semi marched on and delivered a PWRficient 64-Bit dual-core processor earlier this year that consumes somewhere between 5 and 13 Watts with a maximum frequency of 2 GHz. Needless to say, this power envelope is way too high for a mobile part, and is more targeted at the networking and telecommunication space. Indeed, it seems that the processor has been selected by several OEMs for their designs. I would find it highly unlikely for Apple to keep the company alive as is though, and thus it is unlikely that there will be a future roadmap for the PWRficient line which might become a problem for some of P. A. Semi's existent customers. This in turn could play into the hands of Freescale, which has PowerPC based products in a similar power envelope. Additionally, Broadcom and Qualcomm have been looking into expanding past their existing markets, so this might prove a boon to them as well. It also seems unlikely that Apple would intend to use the PWEficient processor to go against Intel's latest Atom processor, which has a lower power envelope and has been well received in the press since being introduced earlier this year. Maybe Apple's acquisition was along the same lines as Sun's, mostly for patents and the engineering team. Anyhow, I would not hold my breath for Apple to announce what they intend to do with the acquisition any time soon. In the meantime, for some interesting speculation and comments, take a look at Beyond3D's article here.